



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,624	02/09/2000	Dean Amburn	AMB 0101 PA	2881
27572	7590	08/01/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			DASS, HARISH T	
			ART UNIT	PAPER NUMBER
			3693	
DATE MAILED: 08/01/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/500,624

Applicant(s)

AMBURN, DEAN

Examiner

Harish T. Dass

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-33,35 and 37-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-33,35 and 37-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-29, 34 and 36 are canceled.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 47 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Particularly, the specification does not provide any inventive steps for the formulation of decision models. For example, the specification does not have any example that shows how buy/sell model is created to allow an ordinary skill in the art to repeat and use the model. The illustration of model in page 17-18 is nothing but a well known programming model which has been in use by the prior art as it is detailed in the following rejections (see CyberCorp).

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3693

Claims 30-33, and 44-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The independent claims 30, 44 and 47 recite limitation "mathematical function" which is indefinite and does not point out to any particular mathematical function.

Claims 44-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The independent claims 44 and 47 recite limitation "mathematical expression" which is indefinite and does not point out to any particular mathematical expression.

Claims 30-33, and 44-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejected claims do not recite any elements of the claimed mathematical function and mathematical expression. Thus, they do not clearly set forth metes and bounds of the claimed process or method, particularly, the mathematical function and mathematical expression cover every mathematical formula and equation whether it is a financial, physics, fluid mechanics, etc.

Art Unit: 3693

Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 47 recite the limitation "the formulation" in "line 6". There are insufficient antecedent basis for this limitation in the claims.

Applicant should properly correct all claims for antecedent bases errors if exist.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien et al (hereinafter Lupien - US 5,845,266) in view of "CyberTrader - Trader's Workstation - An Integrated Trading Environment" submitted with IDS (hereinafter CyberCorp).

Re. Claim 30, Lupien discloses in response to monitoring said decision model, automatically generating a sell transaction order for the security, and automatically transmitting the sell transaction order to the market computer [see entire document particularly, Abstract ; C6 L14-L54; C8 L5-L15, wrap the profile], and in response to

monitoring said decision model, automatically generating a buy transaction order for the security, and automatically transmitting the buy transaction order to a market computer [C4 L18-L60] and decision logic for buying/selling [C13 L5-21]. Lupien does not explicitly disclose receiving from a client of the network accessible brokerage at least one computer implemented decision model for the security wherein the decision model comprises a mathematical function for receiving data and providing at least one value, and inputting data into the decision model, computer implemented monitoring the decision model for the decision to buy the security wherein monitoring the decision model comprises comparing the at least one value to the decision point, wherein the at least one value is compared to a decision point for deciding to buy or sell the security.

However CyberCorp discloses receiving from a client of the network accessible brokerage at least one computer implemented decision model for the security wherein the decision model comprises a mathematical function for receiving data and providing at least one value, and inputting data into the decision model [see selected pages of the document total of 14 pages, where the "OK" button transmits the order and the system receives it], computer implemented monitoring the decision model for the decision to buy the security, comparing the at least one value to the decision point, and wherein the at least one value is compared to a decision point for deciding to buy or sell the security [see page 7 of the manual and chapter 14 - "Alerts, Alarms and Automation", page 45-56, page 48 "scenario 1" the decision point is 79.5; page 49 "scenario 2" the decision point quarter point from current share; page 53 "Conditional Order Scenarios"; page 54 "Advanced Conditional Order/Stop Loss/Alerts" ... "trader learn to write "strings" using

Art Unit: 3693

syntax described below ... "; page 55 see the conditional script inside the window, where the decision point is price  $\geq 5$  where price is compared to 5] to enable the traders to write a software script for conditional orders and let the system to execute the orders automatically. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include computer implemented monitoring the decision model for the decision to buy the security wherein monitoring the decision model comprises comparing the at least one value to the decision point. wherein the at least one value is compared to a decision point for deciding to buy or sell the security, as disclosed by CyberCorp, to let the trader write computer implemented trading codes (script) and let the computer execute the orders automatically based on the script(s), with out human intervention, where the script is comparing at least one value to the security with decision point as a benchmark for deciding to buy or sell a security, specially when the price of a security is changing faster than a human can detect/react.

Re. Claims 44-46, Lupien discloses at least one client computer (terminal) in communication with the automated trading system via the network wherein the client computer is operated by a client computer user [Abstract; Figure 1; C1 L24-L64; C6 L14-L54; C8 L5-L15], and a computer implemented transaction approval processor for determining if a transaction to buy or sell the security is appropriate if the at least one decision model enters the buy state or the sell state [C1 L24-L64; C6 L14-L54; C8 L5-L15], and a computer implemented transaction submission processor for submitting a

Art Unit: 3693

transaction to buy or sell the security if approved by the transaction approval processor, wherein the decision monitor continuously monitors the at least one decision model and the security is repeatedly bought and sold based on the state of the at least one decision model and the determination of the transaction approval processor [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61], and wherein the logic of the decision model is defined by the user [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61], and wherein the logic of the decision model comprises a moving average [C1 L24-L64; C6 L14-L54; C8 L5-L15; C6 L34 to C7 L5; C14 L52-L61]. Lupien, does not explicitly disclose and at least one computer implemented decision model for deciding whether to buy or sell a security wherein the decision model comprises, wherein the at least one decision model enters a state comprising a buy state and a sell state, and a data input processor for receiving data from a data source and inputting the data into the decision model, a computer implemented decision monitor for monitoring the state of the at least one decision model and mathematical expression for receiving data and providing at least one value wherein the at least one value is compared to a decision point for deciding to buy or sell the security, and wherein the mathematical expression comprises a mathematical function. However, CyberCorp discloses these features [see claim 30 above] to enable the traders to write a software script for conditional orders and let the system to execute the orders automatically. Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include computer implemented monitoring the decision model for the decision to buy the



Art Unit: 3693

security wherein monitoring the decision model comprises comparing the at least one value to the decision point. wherein the at least one value is compared to a decision point for deciding to buy or sell the security, as disclosed by CyberCorp, to let the trader write computer implemented a trading codes (script) and let the computer execute the orders automatically based on the script(s), with out human intervention, where the script is comparing at least one value to the security with decision point as a bench mark for deciding to buy or sell a security, specially when the price of a security is changing faster than a human can detect/react.

Re. Claim 47, method claim 47 is rejected with same rational as claim 44. Note: CyberCorp provides means for conditional order formulation of expression and alert.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien and CyberCorp, as applied to claim 30 above, and further in view of Tertitski et al (hereinafter Tertitski - US 6,493,681) and Kane (US 6,317,728).

Re. Claims 31-33, Lupien discloses canceling the sell order if the decision model indicates a trade is undesirable [C11 L1-L22; C19 L22-L40]. Lupien, does not explicitly disclose wherein the step of generating a transaction order comprises after the step of generating a sell order, monitoring the sell order until the order is filled, monitoring the decision model, after the step of transmitting the buy transaction order to the market

Art Unit: 3693

computer, confirming the buy transaction, initiating a floating loss, and monitoring the floating stop loss for a stop loss decision to sell the security, and if a stop loss decision to sell is reached then automatically transmitting a stop loss sell transaction order for the security to the market computer, and floating stop loss comprises a dynamic stop loss. However, after the step of transmitting the buy transaction order to the market computer and confirming the buy transaction, initiating a floating loss are known.

CyberTrader disclose monitoring the decision model, after the step of transmitting the buy transaction order to the market computer [see claim 30] to execute orders automatically. Tertitski discloses monitoring the floating stop loss for a stop loss decision to sell the security, and if a stop loss decision to sell is reached then automatically transmitting a stop loss sell transaction order for the security to the market computer [Abstract; Figures 2-5; C1 L20 to C2 L47; C3 L10 to C4 L10; C4 L50 to C5 L32; claims] to provide day trade recommendation using formula, calculation and best strategy. Kane discloses wherein the step of generating a transaction order comprises after the step of generating a sell order, monitoring the sell order until the order is filled and floating stop loss comprises a dynamic (continuously) stop loss [C4 L66 to C5 L56; C1 L46 to C3 L62; C18 L20-L55; claim 30] to execute buy and sell orders in conformance with the buy/sell rules. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Lupien and CyberTrader and include step of generating order and, monitoring the floating stop loss, as disclosed by Tertitski and Kane, to trade securities based of sound decision model and rules.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of CyberTrader, Kane (US 6,317,728) and Buist (US 6,408,282).

Re. Claim 35, Lupien discloses providing a computer implemented transaction approval process for determining if a transaction to buy or sell the security is appropriate [Lupien -- Abs (accommodates stock exchange rules)], and providing a computer implemented transaction submission process for submitting a transaction to buy or sell the security to a market computer system and monitoring the transaction until it is completed [C8 L5-L15; C11 L1-L21], and inputting data into the buy decision model and the sell decision model wherein the data comprises data for the security [C7 L15-L23], and if the buy decision is reached then determining through the transaction approval process if a buy transaction is appropriate and if so then automatically submitting through the transaction submission process an order to buy the security [C8 L5-L15; C11 L1-L21 ], and if the sell decision is reached then determining through the transaction approval process if a sell transaction is appropriate and if so then automatically submitting through the transaction submission process an order to sell the security [C8 L5-L15; C11 L1-L21], and continuing inputting data into the decision models, monitoring the decision models through the monitoring process, and repeating the steps if the buy decision is reached or the sell decision is reached until the process is stopped [Lupien- C14 L39-L67], and the transaction submission process, the buy decision model, and the sell decision model [C8 L5-L15; C11 L1-L21]. Lupien, explicitly, does not disclose receiving at least

Art Unit: 3693

one computer implemented buy decision model for the security, and receiving at least one computer implemented sell decision model for the security and providing a computer implemented monitoring process for monitoring the decision models for a buy decision or a sell decision monitoring the decision models through the monitoring process for at least one of the buy decision or the sell decision, providing a brokerage having a broker computer system for transacting orders to buy and sell securities, wherein the brokerage computer system is in communication with a plurality of client computer systems, receiving to the brokerage computer system from the client computer system, providing a computer implemented transaction approval process on the brokerage computer system for determining after the decision to buy or sell the security is made, and market computer system and wherein the data is input into the decision model at the brokerage computer system.

However, CyberTrader discloses receiving at least one computer implemented buy decision model for the security, and receiving at least one computer implemented sell decision model for the security and providing a computer implemented monitoring process for monitoring the decision models for a buy decision or a sell decision monitoring the decision models through the monitoring process for at least one of the buy decision or the sell decision and has inputs for receiving buy and sell data and input communicating with the decision logic for executing buy and sell orders in conformance with the buy/sell rules, monitoring the decision models through the monitoring process for the buy decision or the sell decision [see claim 30 above] to enable the traders to

Art Unit: 3693

write a software script for conditional orders and let the system to execute the orders automatically.

Kane discloses a securities or commodities trading system (Intra-Day trading system), based on the principles of artificial intelligence, that includes a computer arrangement communicating with a securities exchange, and providing a computer implemented transaction approval process on the brokerage computer system (Fig. 1 device connected to # 20) for determining after the decision to buy or sell the security is made (execution logic with an executing logic the affirmed buy short order and transaction based on recommendations) and E-Trade [Kane - see entire document particularly, Abstract; CI L20 to C3 L51; C5 L1-L65; C7 L17-L67; C10 L65 to C11 L60; claim 8 (decision models = agents)] to monitor the performance of transaction to minimize the risk.

Buist discloses computer-aided trading of financial instruments, trading of securities over the Internet, collecting, receiving, disseminating or displaying system orders, executing system orders and providing a brokerage having a broker computer system (Fig. 1 # 42; C6 L25-L32) for transacting orders to buy and sell securities, wherein the data is input into the decision model (trade-decision-making) at the brokerage computer system [C1 L13 to C3 L63; C6 L25-L32], wherein the brokerage computer system is in communication with a plurality of client computer systems (Fig. 1 # 10) operated by a plurality of (unrelated) clients [see entire document particularly, Figures 1 (# 10, 42, 55, 12, 44), 2-3; 21 (# 2110, 2180), 22 (# 2210, 2265), 25; CI L56-67; C2 L1-L3, L38-L45; C3 L1-L5, L15-16; C6 L25 to C9 L5; C31 L48-L66; Claim 1],

Art Unit: 3693

receiving to the brokerage computer system (Fig. 1 # 42) from the client computer system (Fig. 1 # 10) [Fig. 1 # 12 connections], market computer system [Fig. 1 # 55] to provide Internet based securities trading system. It is known that the broker's job is to monitor the market whether it is in person or computerized monitoring tools to watch the market trend. Further, decision of trading securities is a function of the client to set the rules for buying/selling, either he/she has to enter the parameters into computer or explain it to his/her broker (authorize broker) and communicate his/her decision to broker (agent) to finalize the deal. Therefore, it would been obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include receiving at least one computer implemented buy decision model for the security, and receiving at least one computer implemented sell decision model for the security and providing a computer implemented monitoring process for monitoring the decision models for a buy decision or a sell decision monitoring the decision models through the monitoring process for the buy decision or the sell decision and has inputs for receiving buy and sell data and input communicating with the decision logic for executing buy and sell orders in conformance with the buy/sell rules, monitoring the decision models through the monitoring process for the buy decision or the sell decision, as disclosed by CyberTrader, to enable the traders to automatically execute order(s) with out human intervention using software codes, and include monitoring the decision models through brokerage network, and describe the system architect of on-line (Internet or day-trading) as discloses by Kane and Buist, to provide system view and system monitoring capability using user interface (GUI) or automatic evaluating

Art Unit: 3693

decision logic to monitor a portfolio of stocks in real time which can shield an investor from loss while maximizing gain.

Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of CyberTrader and Buist (US 6,408,282).

Re. Claim 37, Lupien discloses providing a computer implemented transaction approval process for determining if a transaction to buy or sell the security is appropriate once the decision to buy or the decision to sell has been made [see Ref-to-Lupien above], and e. providing a computer implemented transaction submission process for submitting the transaction to buy or sell the security to a market computer system and monitoring the transaction until it is completed [Ref-to-Lupien above], and f. inputting data into the one or more decision models, wherein the data is input into the one or more decision models until the process is stopped [see Ref-to-Lupien above], and h. if the decision to buy or the decision to sell is reached then determining using the transaction approval process if a buy or sell transaction is appropriate and if so then automatically submitting using the transaction submission process an order to buy or sell the security [see Ref. to-Lupien], and h. iteratively repeating above steps f. and g. until the process is stopped [see Ref-to-Lupien above; C6 L34 to C7 L5; C14 L52-L61]. Lupien, does not explicitly disclose accepting one or more computer implemented decision models for a security wherein the one or more decision models comprise logic for deciding to buy the security

and logic for deciding to sell the security, providing a computer implemented monitoring process for monitoring the one or more decision models for a decision to buy the security or a decision to sell the security; monitoring the one or more decision models using the monitoring process, for the decision to buy and/or the decision to sell; providing a network accessible brokerage comprising a broker computer system; brokerage computer system from the client; providing on brokerage computer system.

However, CyberTrader discloses accepting one or more computer implemented decision models for a security wherein the one or more decision models comprise logic for deciding to buy the security and logic for deciding to sell the security, providing a computer implemented monitoring process for monitoring the one or more decision models for a decision to buy the security or a decision to sell the security; monitoring the one or more decision models using the monitoring process, for the decision to buy or the decision to sell [see claim 30].

Buist discloses computer-aided trading of financial instruments, trading of securities over the Internet, collecting, receiving, disseminating or displaying system orders, executing system orders and a. providing a network accessible brokerage comprising a broker computer system [figure 1, # 12, 44 & 42]; the brokerage computer system (Fig. 1 #42) from the client (Fig. 1 # 10); providing on brokerage computer system (Fig. 1 3 42) [CI L56-67; C2 L1-L3, L38-L45; C3 L1-L5, L15-16; C6 L25 to C9 L5; C31 L48-L66; Claim 1] to provide Internet based securities trading.

Therefore, it would been obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosure of Lupien and include accepting



Art Unit: 3693

one or more computer implemented decision models for a security wherein the one or more decision models comprise logic for deciding to buy the security and logic for deciding to sell the security, providing a computer implemented monitoring process for monitoring the one or more decision models for a decision to buy the security or a decision to sell the security; monitoring the one or more decision models using the monitoring process, for the decision to buy or the decision to sell, as disclosed by CyberTrader to automate order process, and include providing a network accessible brokerage system, as disclosed by Buist, to provide Internet based securities trading to allow the clients to enter their orders using computer script over the internet and execute the order(s) automatically.

Re. Claims 38-39, Lupien discloses wherein the decision model comprises a moving average calculation of at least a portion of the data [see Ref-to-Lupien above (average price=aggregate average price)], and wherein the decision model comprises a weighted data process [see Ref-to-Lupien; C2 L62-L67; C23 L1-L20j].

Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien, CyberTrader and Buist, as applied to claim 37 above and further in view of Kane (US 6,317,728).

Re. Claims 40-43 Lupien, CyberTrader or Buist does not explicitly disclose after the steps of submitting an order to buy the security and monitoring the transaction until it is completed, automatically initiating a floating stop loss process for selling the security wherein either the floating stop loss process or the decision model can reach a decision to sell the security, and wherein the floating stop loss is a dynamic floating stop loss, and the step of validating the data before the step of inputting the data into the decision model, and further comprises logic to sell short the security and logic to buy to cover the security. However, Kane discloses these steps: after the steps of submitting an order to buy the security and monitoring the transaction until it is completed, automatically initiating a floating stop loss (stop loss order) process for selling the security wherein either the floating stop loss process or the decision model can reach a decision to sell the security, and wherein the floating stop loss is a dynamic (monitoring stocks continuously) floating stop loss [see Ref-to-Kane above; C2 L22-L34], and the step of validating the data before the step of inputting the data into the decision model [see Ref. to-Kane above; C7 L34-L67; C13 L25-L65], and further comprises logic to sell short the security and logic to buy to cover the security [see Ref-to-Kane above; C3 L20-L58] to provide a security trading system to individuals and trading house which monitors and executes trades automatically.

Therefore, it would be obvious to one ordinary skill in the art at the time the applicant's invention was made to modify the disclosures of Lupien, CyberTrader and Buist and include above steps, as disclosed by Kane, to allow the investors minimize their investment risk by using the automatic monitoring and trade execution system.

***Response to Arguments***

4. Applicant's arguments filed 03/31/2006 have been fully considered but they are not persuasive.

In response to Applicant declaration under 37 C.F.R 1.131, attached is an earlier version of CyBerCorp "Trader's Workstation an Integrated Trading Environment version 1.7" dated 10/1998 that shows the Alert screen with mathematical expression (page 32) and also interesting pages are page 29-30 (item e-h).

In response to applicant's argument (remark pages 10-11) recites "claims 30-33 and 44-45 are rejected ... "limitation "mathematical function" as stated ... is indefinite ...a brief review of several other patents also ... without pointing to any particular mathematical function." Applicant's argument is not persuasive, because: 1). This Examiner cannot second guess the reasons for other examiners review, prosecution and decisions. 2). The Applicant's claims do not have any step to clarify what mathematical function are invented, there is no input/output relation are shown in specification? Similarly, what mathematical expressions (formula) have been derived and how they are implemented in business of buying and selling, what are the parameters and variables? Stocks are bough and sold with client's set parameters and criteria all the time. For example, a day trader client calls his/her agent and places an order that say's buy me 1000 shares of stock "A" at market price and sell it if the stock goes up \$0.50 or buy me 1000 shares of stock "A" at \$48.00 (assumes he knows the stock price) and sell it if the stock goes up \$50.00 or sell it if the stock goes to \$47.00, the agent has to execute the order as they

Art Unit: 3693

are expressed by the client. The programming logic for this order is simple and well known. Applicant's use of mathematical function and mathematical expression have not bounds and cover every mathematical formula and equation in finance, automatic train control (for example: if  $n > m$  than  $f = g^2$ ), physics, fluid mechanics, etc. Applicant's limitations do not show any equation with inventive steps.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

In future correspondence, applicant is requested to add a sentence to say that no new matter is added which is not originally presented in original specification.

Art Unit: 3693

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

Function (mathematics), describes what mathematical function is.

Expression (mathematics), describes what mathematical expression is.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 09/500,624

Page 21

Art Unit: 3693

Harish T Dass

Examiner

Art Unit 3628

6/23/06



HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600